

JUVENILE FIRESETTING

Introduction

Causes and Risk Factors

Profile of a Firesetter

Environmental Issues

Comorbidity

Elements of Effective Treatments

Promising Treatment Approaches

Cognitive Behavioral Therapy and Fire Safety Education

Treatment Settings

Treatment in a Residential Facility

Foster Care

Inpatient Hospitalization

Ineffective Treatments

Conclusion

Introduction

When juvenile delinquency is mentioned, arson is not usually the first type offense that comes to mind. However, juveniles are arrested for a greater share of this crime than any other age group (Office of Juvenile Justice and Delinquency Prevention [OJJDP], 1997). All forms of arson cause hundreds of millions of dollars in damages and thousands of needless injuries and deaths each year. Almost 85% of the victims of fires started by children are the children themselves (Burn Institute, 2004).

Juvenile firesetters are typically defined as children or adolescents who engage in firesetting (Slavkin, 2000). Historically, juvenile firesetting has been viewed as a problem particular to “curious kids” (U.S. Fire Administration [USFA] of the Federal Emergency Management Agency [FEMA], 1997). Fires set by children playing with matches and lighters tend to be categorized as “accidental” or “children playing.” However, juvenile firesetting includes the deliberate destruction of property by juveniles through fire, which sometimes results in casualties (USFA).

Federal Bureau of Investigation statistics for 1995 show that juveniles accounted for 52% of arson arrests (OJJDP, 1997). Although legal definitions of arson vary from state to state, if an evaluation reveals that there is sufficient evidence of malicious and willful firesetting, the juvenile may be charged with arson (OJJDP). Table 1 outlines additional facts on Firesetting.

Causes and Risk Factors

At this point in time, specific information is not available about juvenile firesetting. Most attention to firesetting has been included within broader categories of delinquency and aggression in children (Kazdin, as cited in Slavkin, 2000). However, no separate review of firesetting from a developmental framework has been performed and it is believed that juvenile firesetting, much like other forms of delinquency and aggression in juveniles, can be explained as an example of problem

behaviors. To explain a problem behavior as complex as firesetting, both individual and environmental predictors must be examined simultaneously (Magnusson & Endler, as cited in Slavkin).

Table 1

Facts on Juvenile Firesetting

- More than 40,000 arson incidents in the U.S. each year are attributable to juvenile arson.
- Children under 18 account for 55% of the arrests for arson in the U.S.; nearly half of these are age 15 or less and five percent of those arrested are under age 10.
- An estimated 300 deaths, 2,000 injuries and \$300 million in property damage in the U.S. result annually from fires set by youth.

Source: National Volunteer Fire Council, 2004.

Researchers are attempting to gather data about the children who are firesetters and their families, factors driving their behavior, and the number of firesetting incidents associated with a child or adolescent who is being screened for firesetting behavior—even if a fire department has never responded to one of these fires (Wilcox, 2000). Further systematic study of this behavior is necessary both to understand this behavior and to design effective interventions.

According to the USFA (1997), there is a general consensus as to what motivates children to become involved with fire. Curiosity motivates a significant portion of fire involvement. Developmental studies report that 40% of all children have engaged in fire play. Children who are firesetters are by nature risk takers and learn by doing. This trait, combined with ready access to matches and lighters, the belief that parents would not punish them, a poor understanding of fire, and lapses in supervision, accounts for many thousands of fires every year (USFA). Table 2 outlines some of the special circumstances surrounding juvenile firesetting.

Table 2

Factors Contributing to Juvenile Firesetting

Peer Pressure	25.5%
ADHD on Meds	22.5%
Environmental	12%
Curiosity	10%
None	7.5%
Other Learning Disabilities	5.5%
Mental Health Issues	5%
Lack of Adult Supervision	5%
Anger	3%
ADHD no Meds	1%
Possible ADHD	1%
Molestation	1%
Impulsivity	1%

Source: 1999/2000 Juvenile Firesetter Statistics, Burn Institute, 2004.

The Office of Juvenile Justice and Delinquency Prevention (OJJDP) has found that fire may be used by youth as both an instrument of power and as a weapon, as opposed to merely being a product of curiosity (Office of Juvenile Justice and Delinquency Prevention, 2005). Moreover, OJJDP makes note of two firesetting behaviors, expressive and instrumental, which may help to explain why juveniles use firesetting to act out a behavior (OJJDP). According to OJJDP, expressive firesetting behavior is an expression of psychopathology or unresolved trauma and instrumental firesetting behavior is a behavior set to achieve an established goal (OJJDP).

Profile of a Firesetter

According to Slavkin, while only 10% of juveniles who are arrested are juvenile firesetters, juvenile firesetters are more likely to be involved in a greater proportion of arrests overall, when compared to other arrested juveniles (2000). A recent study determined that children classified as firesetters were 3.8 times more likely to be referred to juvenile court than nonfiresetters (Becker et al., 2004). Firesetters also engage in property destruction and crimes of physical aggression, such as forcible rape (11%), nonviolent sexual offenses (18%), vandalism (19%), and arson (35%) (Williams, as cited in Slavkin). Furthermore, adolescent firesetters have higher levels of antisocial behaviors, higher levels of aggression, and are more likely to connect their deviance with covert, aggressive expressions, when compared with other firesetters (Slavkin).

In all juvenile arson cases, the intensity and enormity of the fire tend to escalate with the age of the firesetter, with the “bigger the child, the bigger the fire” (Little, 1998). The average age of a juvenile firesetter is 11 (Little). The majority (80%) of juvenile firesetters are males, with the majority of juvenile arsons being committed by middle class Caucasian males (Little). The most common factor among all juvenile firesetters is a severely disturbed home environment with only one or no biological parents present in the home (Little). However, the strongest predictor of recidivism is the juvenile being in a home with a significant number of family problems (USFA, 1997). A pattern or history of multiple problems exists with firesetters. True juvenile arson is committed by a child who escalates to this stage of destructiveness; then a sequence of firesetting begins (Little).

Another characteristic of many juvenile firesetters is poor school performance. Depending upon the age group, they may also have a history of truancy, disruptive behavior or hyperactivity (Little, 1998). Having poor relationships with peers and an inability to form close friendships are other common features in juvenile firesetters. They lack assertiveness and can be easily manipulated and vulnerable to others. Some statistics show sexual abuse in both males and females is a common pattern for the juvenile arsonist, but the statistics to support this belief are limited, as until recently few questions were ever put to juvenile male firesetters regarding sexual abuse.

Environmental Issues

Further consideration should be given to the environmental characteristics that relate to juvenile firesetting. Variability in problem behaviors stems largely from differences in perceptions of environmental characteristics (Slavkin, 2000). Family, school, and peer problems are major influences that may promote firesetting and the continuation of patterns of firesetting (Kolko & Kazdin, as cited in Slavkin). Moderate youth firesetting has been associated with limited family sociability, whereas recidivism has been associated with lax discipline, family conflict, limited parental acceptance, and family affiliation (Kolko & Kazdin, as cited in Slavkin). Parental influences, such as limited supervision and monitoring, early learning experiences, parental distance

and uninvolved, and parental pathology, have been identified as predictors of juvenile firesetting (Kolko & Kazdin, as cited in Slavkin).

Comorbidity

Clinical studies that have examined juvenile firesetters find that many of these children have conduct and aggression problems. A recent study researched conduct disorders [CD] in conjunction with firesetting and found that approximately 30% of children participating in firesetting have been diagnosed with CD (Becker et al., 2004). Kolko, as cited by Slavkin (2000), found that early childhood firesetters can be characterized as having multiple behavior problems with few internalizing behaviors, such as depression, but many externalizing behaviors, such as rule breaking, aggression, and destruction. Some children are diagnosed as having attention deficit hyperactivity disorder (ADHD) (USFA, 1997). In a sample of hospitalized firesetters, Dr. David Kolko at the University of Pittsburgh Medical Center performed a study and found a higher level of delinquency, aggressiveness, and hyperactivity among firesetting children than in hospitalized children with no history of firesetting (USFA). Moreover, these children were less socially skilled, more aggressive, and presented with learning disabilities (USFA).

A recent study to investigate the prevalence of self-reported firesetting determined that female firesetters were more likely to have serious antisocial behaviors, participate in risk-taking activities, and have a substance abuse problem (Martin et al., 2004). Another study researched the potential link between firesetting and delinquency in adolescents (Becker et al., 2004). The study indicated that firesetters are more likely to be delinquent than nonfiresetters, while adolescents who continue in the practice of firesetting tend to be chronically criminal. The study also found evidence that firesetting may be related to extreme antisocial behavior which is not always accounted for by the presence of CD (Becker et al.).

Elements of Effective Treatments

Seven components common to effective juvenile firesetter programs have been identified and are described in the following listing (OJJDP, 1997).

1. A program management component to make key decisions, coordinate interagency efforts, and foster interagency support.
2. A screening and evaluation component to identify and evaluate children who have been involved in firesetting.
3. An intervention services component to provide primary prevention, early intervention, and/or treatment for juveniles, especially those who have already set fires or shown an unusual interest in fire.
4. A referral component to link the program with the full range of agencies that might help identify juvenile firesetters or provide services to them and their families.
5. A publicity and outreach component to raise public awareness of the program and encourage early identification of juvenile firesetters.
6. A monitoring component to track the program's identification and treatment of juvenile firesetters.
7. A juvenile justice system component to forge relationships with juvenile justice agencies that often handle juvenile firesetters.

Individual and family-related factors that may predispose the firesetting youth should also be explored and identified in order to effectively treat this behavior. Assessing personality structure

and individual characteristics, family and social circumstances, and immediate environmental conditions allows for more effective treatment (Williams & Clements, 2007). It is important to gather data not only for treatment but also to discover the motivation behind the firesetting behavior (Sharp et al., 2005). Factors to be considered in the assessment include history or frequency of incidents, method, motive, ignition, target, and behavior (Sharp et al.).

Promising Treatment Approaches

There is no single identified treatment that is effective for treating this behavior. However, many treatments have proven beneficial in the management of this behavior. Many of these treatments are appropriately applied to firesetters with consideration for their age (Slavkin, 2000).

Cognitive Behavioral Therapy and Fire Safety Education

Cognitive behavioral therapy and fire safety education were found to significantly curtail firesetting and match play behaviors up to a year after intervention (*Mental Health Weekly*, 2001). Structured treatments designed to intervene with children who set fires were also found to have greater effect in the long-term than a brief visit with a firefighter (*Mental Health Weekly*). Both cognitive behavioral therapy and fire safety education were also shown to be effective at reducing other activities associated with firesetting, such as playing with matches and being seen with matches or lighters (*Mental Health Weekly*).

Irrespective of the seriousness of an incident or the child's motive in starting a fire, education regarding fire should be part of the intervention strategy. Such education should include information about the nature of fire, how rapidly it spreads, and its potential for destructiveness (USFA, 1997). Information about how to maintain a fire-safe environment, utilizing escape plans and practice, and the appropriate use of fire have been shown to be effective parts of comprehensive arson intervention programs, at least for younger juveniles (USFA).

Treatment Settings

Sometimes it is determined that the juvenile should be confined to a secure facility, residential treatment center, or hospital, although treatment for firesetting usually occurs in the least restrictive environment, depending on the seriousness of the offense and based on the needs of the child (USFA, 1997). Although many juvenile firesetters can be maintained in the community with appropriate supervision, careful assessment is crucial in order to provide the appropriate level of care (USFA). Such an assessment must consider the child, family, environment, facts about the fire and other fire history, as well as the child's reaction to the fire and sense of accountability (USFA). In addition, consideration should be given to ensure that the child does not pose a risk to others and the public safety is protected.

Treatment in a Residential Facility

Many programs will not admit a child with a history of firesetting for fear that the child will burn the facility (USFA, 1997). However, residential treatment can provide a safe and comprehensive setting for providing treatment to firesetters and provide treatment for any other co-occurring or familial issues.

Foster Care

There is a strong link between neglect and abuse and firesetting, so placing a child in a safe, supervised family setting can be very effective. When firesetting occurs as a result of neglect or

abuse, the removal of the outside stressors can often cause the firesetting behavior to cease (USFA, 1997). Certain foster homes can be classified as “intensive” foster homes to allow for these difficult types of placements (USFA). Considerable attention is placed on fire safety practices and the foster parents receive in-depth training in working with difficult adolescents. Such training includes communication and problem-solving skills, supervision, and restraint, behavior management, and fire safety education for prevention and intervention (USFA). The children in foster care receive counseling, additional support services and the firesetter’s parents are included as a component in the treatment plan (USFA). It is very important that the risk be acknowledged in this and any other community-based treatment intervention. Emphasis is placed on training and making the firesetter aware of the potential dangers of firesetting (USFA).

Inpatient Hospitalization

Although inpatient facilities may also be reluctant to accept children with a history of firesetting, inpatient treatment is effective in treating these children when an effective treatment protocol is in place (USFA, 1997).

Dr. David Kolko at the University of Pittsburgh Medical Center has successfully treated firesetters in an inpatient treatment setting using intensive individual, group and family counseling with a cognitive treatment approach (USFA, 1997). This treatment approach challenges the child’s rationalizations of the firesetting behavior. A skills-based approach is employed, with particular emphasis placed on providing interpersonal and problem solving skills (USFA).

Ineffective Treatments

It is important to acknowledge that, while simple curiosity about fire is normal, firesetting is not, and this behavior can be deadly. Leaving the child untreated, as recent studies have shown, is not beneficial, as children usually do not outgrow this behavior (Waupaca Area Fire District, 2002). Accordingly, the problems must be dealt with to prevent the fires from increasing in number and intensity.

Satiation, the practice of repetitively lighting and extinguishing fire, was once thought to be a deterrent to firesetting, based on the idea that a child curious about fire will tire of the exposure. However, the more practice a child has with fire, the more competent he may feel, which may make him more likely to increase the behavior (Sharp, et al., 2005). Satiation, therefore, should not be employed with children who set fires. Ignoring firesetting until the child “outgrows” it also is unwise because it communicates disinterest in the child’s well-being and experiences, which is likely to escalate dysfunctional behavior patterns (Sharp et al.).

Conclusion

In conclusion, current theories suggest that juvenile firesetting stems from the most obvious possible cause, a childhood environment filled with multiple and overwhelmingly negative factors. Furthermore, firesetting behaviors appear to differ as a result of both individual and environmental circumstances. The unique circumstances and characteristics of individual fire setters require extensive evaluation to determine the best course of treatment. An appropriate review of firesetting should include an examination of the firesetter’s history, such as with prior fire learning experiences, cognitive and behavioral reviews, and parent and family influences and stressors (Slavkin, 2000).

Sources

Becker, K., Stuewig, J., Herrera, V., & McCloskey, L. (2004). A Study of Firesetting and Animal Cruelty in Children: Family Influences and Adolescent Outcomes. *Journal of the American Academy of Child & Adolescent Psychiatry*, 43 (7).

Burn Institute. (2004). Fire & Burn Prevention Education, Juvenile Firesetter Program. [Online]. Available: http://www.burninstitute.org/fbpe/4_5.html. [December 2004].

Little, P. (1998). National Paralegal Reporter. *Juveniles & Arson*.

Martin, G., Bergen, H., Richardson, A., Roeger, L., & Allison, S. (2004). Correlates of Firesetting in a Community Sample of Young Adolescents. *Australian and New Zealand Journal of Psychiatry*, 38 (3), 148-154.

Mental Health Weekly. (2001). Intensive Interventions May Reduce Fire-Setting.

National Volunteer Fire Council. (2004). *2004 Arson Awareness Week*. [Online]. Available: http://www.nvfc.org/news/hn_2004_arson_awareness.html. [July 2005].

Office of Juvenile Justice and Delinquency Prevention (OJJDP). (1997). *Juvenile Firesetting and Arson. Fact Sheet 51*.

Office of Juvenile Justice and Delinquency Prevention (OJJDP). (2005). *Juvenile Firesetting: A Research Overview*. [Online]. Available: <http://www.justiceworks.unh.edu/jjb0505.pdf>. [October 2007].

Sharp, D., Blaakman, S., Cole, E., & Cole, R. (2005). Evidence-Based Multidisciplinary Strategies for Working With Children Who Set Fires. *Journal of American Psychiatric Nurses Association*, 11, 329-337. [Online]. Available <http://jap.sagepub.com/cgi/reprint/11/6/329.pdf?ck=nck>. [December 2007].

Slavkin, M. *Juvenile Firesetters: An Exploratory Analysis*.

U.S. Fire Administration (USFA) of the Federal Emergency Management Agency. (1993). *The National Juvenile Firesetter/Arson Control and Prevention Program Fire Service Guide to a Juvenile Firesetter Early Intervention Program*.

U.S. Fire Administration (USFA) of the Federal Emergency Management Agency. (1997). *Arson and Juveniles: Responding to the Violence. A Review of Teen Firesetting and Interventions, Special Report*.

Waupaca Area Fire District. (2002). *Juvenile Fire Setting*. [Online]. Available: <http://www.cityofwaupaca.org/waupacafire/default.htm>. [October 2002].

Wilcox, D. (2000). Oregon Office of State Fire Marshal, Juvenile Firesetter Intervention Program. *Hot Stuff. How Do We Know What We Know About Firesetting Behavior?*

William, D., & Clements, P. (2007). Intrapsychic Dynamics, Behavioral Manifestations, and Related Interventions with Youthful Fire Setters. *Journal of Forensic Nursing*, 3 (2). Medscape.

Organizations/Weblinks

Focus Adolescent Services

Firesetting and Youth
877-362-8727 or 410-341-4342
<http://www.focusas.com/Firesetting.html>

SOS Fires: Youth Intervention Programs

The Youth Firesetting Intervention Resource Site
<http://sosfires.com>

U.S. Department of Justice Juvenile Justice

Office of Juvenile Justice and Delinquency Prevention
National Juvenile Firesetter/Arson Control and Prevention Program Clearinghouse
800-638-8736

U.S. Fire Administration of the Federal Emergency Management Agency (FEMA)

<http://www.usfa.fema.gov>.

Virginia Department of Fire Programs (VDFP)

<http://www.vafire.com>

USFA/FEMA Resource List: Primary Prevention School Curriculum and Programs

<i>CTW'S Fire Safety Project</i> <i>Sesame Street Fire Safety Resource Book</i> Children's Television Workshop 1 Lincoln Plaza - New York, NY 10023 212-595-3456	<i>The Juvenile Crime Prevention Curriculum</i> Public Relations Department The St. Paul Companies - 385 Washington Street - St. Paul, MN 55102
<i>Learn Not to Burn</i> National Fire Protection Assn. 1 Batterymarch Park, P.O. Box 9101 Quincy, MA 02269 617-770-3000	<i>Follow the Footsteps to Fire Safety</i> City of St. Paul Department of Fire and Safety Services Fire Prevention Division 100 East Eleventh Street - St. Paul, MN 55101 612-228-6203
<i>Knowing About Fire</i> National Fire Service Support Systems 20 North Main Street - Pittsford, NY 14534 716-264-0840	<i>Project Open House</i> Farmington Hills Fire Department 28711 Drake Road Farmington Hills, MI 48331-2525 313-553-0740
<i>Fire Safety Skills Curriculum</i> Program Manager Office of the State Fire Marshal 3000 Market Street, NE, #534 Salem, OR 97310 503-378-3475	<i>Kid 's Safe Program</i> Fire Safety Education Curriculum for Preschool Children Oklahoma City Fire Department Public Education 820 N.W. 5 th Street - Oklahoma City, OK 73106 405-297-3314

